

## **Chapter 14. Verification Procedure, Warranty and In-Use Compliance Requirements for In-Use Strategies to Control Emissions from Diesel Engines**

Amend Sections 2701, 2702, 2703, 2704, 2706, 2709, 2710, Title 13, California Code of Regulations, to read as follows:

**Note:** The pre-existing regulation text is set forth below in normal type. The amendments are shown in underline to indicate additions and ~~strikeout~~ to indicate deletions.

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### **§ 2701. Definitions**

- (a) The definitions in Section 1900(b), Chapter 1, Title 13 of the California Code of Regulations are incorporated by reference herein. The following definitions shall govern the provisions of this chapter:
- (1) "15 ppmw or less sulfur fuel" means diesel fuel with a sulfur content equal to or less than 15 parts per million by weight (ppmw).
  - (2) "Alternative Diesel Fuel" means any fuel used in diesel engines that is not a reformulated diesel fuel as defined in Sections 2281 and 2282 of Title 13, of the California Code of Regulations, and does not require engine or fuel system modifications for the engine to operate, although minor modifications (e.g. recalibration of the engine fuel control) may enhance performance. Examples of alternative diesel fuels include, but are not limited to, biodiesel, Fischer Tropsch fuels, and emulsions of water in diesel fuel. Natural gas is not an alternative diesel fuel. An emission control strategy using a fuel additive will be treated as an alternative diesel fuel based strategy unless:
    - (A) ~~The additive is supplied to the vehicle or engine fuel by an on-board dosing mechanism, or~~
    - (B) ~~The additive is directly mixed into the base fuel inside the fuel tank of the vehicle or engine, or~~
    - (C) ~~The additive and base fuel are not mixed until vehicle or engine fueling commences, and no more additive plus base fuel combination is mixed than required for a single fueling of a single engine or vehicle.~~

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NOTE: Authority cited: Sections 39002, 39003, 39500, 39600, 39601, 39650-39675, 40000, 43000, 43000.5, 43011, 43013, 43018 and 43105, 43600, 43700, Health and Safety Code. Reference: Sections 39650-39675, 43000, 43009.5, 43013, 43018, 43101, 43104, 43105, 43106, 43107, and 43204-43205.5 Health and Safety Code; Title 17 California Code of Regulations Section 93000.

## § 2702. Application Process

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- (b) Proposed Verification Testing Protocol. Before formally submitting an application for the initial verification of a diesel emission control strategy, the applicant must submit a proposed verification testing protocol at the Executive Officer's discretion. The Executive Officer shall use the information in the proposed protocol to help determine whether the strategy relies on sound principles of science and engineering to control emissions, the need for additional analyses, and the appropriateness of allowing alternatives to the prescribed requirements. The protocol should include the following information:

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- (5) A brief statement that the applicant agrees to do the following:

(A) Provide a warranty pursuant to the requirements of Section 2707

(B) Submit in-use compliance information pursuant to the requirements of Section 2709

(C) Keep records that contain at least the following information:

1. Updated end user contact information
2. A description of the vehicles or equipment that the applicant's products are installed on
3. A description of the engines that the applicant's products are installed on (make, model year, model, etc.)

These records must be kept until the in-use compliance requirements are completed.

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- (h) Conditional Extensions of an Existing Verification for On-road Applications. If an applicant has a verified diesel emission control strategy and wishes to extend the verification to include new on-road emission control groups, the applicant may apply to receive a conditional extension. If the Executive Officer determines that the diesel emission control strategy is technologically sound and appropriate for the intended application, the applicant may be granted a conditional extension. Upon receiving a conditional extension, the applicant may sell the diesel emission control strategy as a verified product for up to one year. To obtain full verification, the applicant must complete the requirements set forth by the Executive Officer. In granting a conditional extension, the Executive Officer may consider all relevant information including, but not limited to, the following: the design of the diesel emission

control system, original test data, other relevant test data, the duty cycle of the prospective emission control group, field experience, and other relevant information. For the time period of the conditional extension, a conditional extension is equivalent to a verification for the purposes of satisfying the requirements of the in-use compliance regulations. Emission control strategies that are conditionally verified are not eligible for conditional extensions.

- (h) (i) Design Modifications. If an applicant modifies the design of a diesel emission control strategy that has already been verified or is under consideration for verification by the Executive Officer, the modified version must be evaluated under this Procedure. The applicant must provide a detailed description of the design modification along with an explanation of how the modification will change the operation and performance of the diesel emission control strategy. To support its claims, the applicant must submit additional test data, engineering justification and analysis, or any other information deemed necessary by the Executive Officer to address the differences between the modified and original designs. Processing time periods follow sections (e) and (f) above.
- (j) Verification Transfers. If an applicant wishes to market another manufacturer's previously verified diesel emission control system, the applicant must do the following:
- (1) Submit a letter of consent from the party that legally holds the original verification. The letter must give the applicant the right to hold a verification for the diesel emission control system and, if applicable, to use information that was previously submitted as support in the application for verification.
  - (2) Submit an application per Section 2702 of the Procedure. If previously submitted information is included, necessary additional information must be submitted that satisfies all applicable requirements of the Procedure (e.g. testing data, warranty statement, labels, owner's manual, etc.).
  - (3) Submit a description of the diesel emission control strategy's principles of operation. The applicant must demonstrate understanding of how the product relies on sound principles of science and engineering to achieve emissions reductions.
- (k) Emission Control Systems Approved in Other Verification Programs. Applicants that are verified by other diesel emission control programs must submit an application that contains the information requested in part (d) above. Pre-existing data and information used to receive approval from other programs may be submitted, but the application must meet requirements that are unique to this Procedure including, but not limited to, system labels compliant with Section 2706(g), a California owner's manual compliant with Section 2706(i), a warranty compliant with Section 2707, and multimedia evaluation if applicable. The Executive Officer may evaluate all submitted

information and additional requested information by the Procedure to determine if a diesel emission control strategy merits ARB verification.

(j) (l) Treatment of Confidential Information. Information submitted to the Executive Officer by an applicant may be claimed as confidential, and such information shall be handled in accordance with the procedures specified in Title 17, California Code of Regulations, Sections 91000-91022. The Executive Officer may consider such confidential information in reaching a decision on a verification application.

(m) Applicants that receive verifications, conditional verifications, or conditional extensions must keep records that have valid end user contact information, a description of the vehicles the units are applied to, and a description of the engines the units are applied to (make, model year, model, etc.). The applicant must keep these records until the in-use compliance requirements are completed. The Executive Officer may request that such records be made available at any time. The applicant must provide these records within 30 days of the request by the ARB. Failure to submit these records within 30 days of the request may result in suspension of verification and/or may receive civil penalties as specified in state law and regulations including, but not limited to, the Health and Safety Code.

(j) (n) The Executive Officer may lower the verification level or revoke the verification status of a verified diesel emission control strategy family if there are errors, omissions or inaccurate information in the application for verification or supporting information. The applicant may also receive civil penalties as specified in state law and regulations including, but not limited to, the Health and Safety Code.

NOTE: Authority cited: Sections 39002, 39003, 39500, 39600, 39601, 39650-39675, 40000, 43000, 43000.5, 43011, 43013, 43018 and 43105, 43600, 43700, Health and Safety Code. Reference: Sections 39650-39675, 43000, 43009.5, 43013, 43018, 43101, 43104, 43105, 43106, 43107, and 43204-43205.5 Health and Safety Code; Title 17 California Code of Regulations Section 93000.

### **§ 2703. Emission Testing Requirements.**

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(m) Quality Control of Test Data. The applicant must provide information on the test facility, test procedure, and equipment used in the emission testing. The testing information must be approved by the Executive Officer. For data gathered using on-road and off-road test cycles and methods, applicants must provide evidence establishing that the test equipment used meets the specifications and calibrations given in the Code of Federal Regulations, Title 40, Part 86, subpart N.

- (n) The Executive Officer may, with respect to any diesel emission control strategy sold, leased, offered for sale, or manufactured for sale in California, order the applicant or strategy manufacturer to make available for testing and/or inspection a reasonable number of diesel emission control systems, and may direct that they be delivered at the applicant's expense to the state board at the Haagen-Smit Laboratory, 9528 Telstar Avenue, El Monte, California or where specified by the Executive Officer. The Executive Officer may also, with respect to any diesel emission control strategy being sold, leased, offered for sale, or manufactured for sale in California, have an applicant test and/or inspect a reasonable number of units at the applicant or manufacturer's facility or at any test laboratory the Executive Officer agrees upon under the supervision of the Executive Officer.

NOTE: Authority cited: Sections 39002, 39003, 39500, 39600, 39601, 39650-39675, 40000, 43000, 43000.5, 43011, 43013, 43018 and 43105, 43600, 43700, Health and Safety Code. Reference: Sections 39650-39675, 43000, 43009.5, 43013, 43018, 43101, 43104, 43105, 43106, 43107, and 43204-43205.5 Health and Safety Code; Title 17 California Code of Regulations Section 93000.

#### **§ 2704. Durability Testing Requirements**

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- (d) Service Accumulation. The durability demonstration consists of an extended service accumulation period in which the diesel emission control strategy is implemented in the field or in a laboratory the Executive Officer agrees upon, with emission reduction testing before and after the service accumulation. Service accumulation begins after the first emission test and concludes before the final emission test. The pre-conditioning period required in Section 2703 (c) cannot be used to meet the service accumulation requirements.

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NOTE: Authority cited: Sections 39002, 39003, 39500, 39600, 39601, 39650-39675, 40000, 43000, 43000.5, 43011, 43013, 43018 and 43105, 43600, 43700, Health and Safety Code. Reference: Sections 39650-39675, 43000, 43009.5, 43013, 43018, 43101, 43104, 43105, 43106, 43107, and 43204-43205.5 Health and Safety Code; Title 17 California Code of Regulations Section 93000.

#### **§ 2706. Other Requirements.**

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- ~~(c) Fuel Additives. Diesel emission control strategies that use fuel additives must meet the following additional requirements for verification. Fuel additives must be used in combination with a level 3 diesel particulate filter unless they can be proven to the satisfaction of the Executive Officer to be safe for use alone. In addition, the applicant must meet the following requirements:~~
- ~~(1) The applicant must submit the exact chemical formulation of the fuel additive,~~
  - ~~(2) Diesel emission control systems employing the dosing of an additive in conjunction with a diesel particulate filter must include an on-board monitor of the additive level in the reservoir, integrated with the diesel particulate filter. The on-board monitor for fuel additive must include indicators to notify the operator when the additive level becomes low and when the additive tank is empty. In addition, the on-board monitor must be capable of shutting off the supply of additive, if there is a detected diesel particulate filter problem,~~
  - ~~(3) The applicant must submit to the Executive Officer environmental, toxicological, epidemiological, and other health-related data pertaining to the fuel additive every two years. The Executive Officer will review the data, including any new information, and may revoke the verification if the data indicate that the fuel additives cause, or are linked, to negative environmental, or health consequences.~~
  - ~~(4) The applicant must conduct additional emission tests of fuel additives.~~
    - ~~(A) Except as provided in (B) below, the additional emission tests must follow the same test procedures, test cycles, and number of test runs as indicated in Section 2703, except that the concentration of the additive must be at least 50 ppm or 10 times higher than that specified for normal use, whichever is highest. In all other respects, the additive in the high concentration test solutions must be identical to that in the fuel additive submitted for verification.~~
    - ~~(B) The applicant may petition to use a concentration less than that required in (A), above, if the higher dose would result in catastrophic damage to the engine. The applicant must supply information on the failure modes, and the level of the additive that would trigger failure. The applicant must also supply information and data supporting the highest feasible dose for testing. An increase in emissions is not by itself sufficient to justify a dose lower than that required in (A), above, and must be correlated to potential engine damage. After reviewing this information and any other relevant information, the Executive Officer shall determine if testing at a lower level could be accepted, or if testing must be conducted at 50 ppm or ten times the specified dose rate as required in (A).~~
  - ~~(5) Fuel additives must be in compliance with applicable federal, state, and local government requirements. This requirement includes, but is not limited to, registration of fuel additives with the U.S. EPA.~~

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NOTE: Authority cited: Sections 39002, 39003, 39500, 39600, 39601, 39650-39675, 40000, 43000, 43000.5, 43011, 43013, 43018 and 43105, 43600, 43700, 43830.8, Health and Safety Code. Reference: Sections 39650-39675, 43000, 43009.5, 43013, 43018, 43101, 43104, 43105, 43106, 43107, 43204-43205.5, and 43830.8 Health and Safety Code; Section 71017 Public Resources Code; Title 17 of Regulations Section 93000.

## **§ 2709. In-Use Compliance Requirements**

(a) Applicability. These in-use compliance requirements apply to all diesel emission control strategies for on-road, off-road, and stationary applications. It is the responsibility of the applicant to perform in-use compliance testing for each verified diesel emission control strategy family (see Section 2706(g)(2)). Testing is required when 50 units within a given diesel emission control strategy family have been sold or leased in the California market. Applicants must submit an in-use compliance testing proposal for approval by the Executive Officer prior to the in-use compliance testing.

(b) In-Use Compliance Testing Proposal. The applicant must submit the Phase 1 in-use compliance testing proposal no later than 90 days after the 50<sup>th</sup> unit is sold. The applicant must submit the Phase 2 in-use compliance testing proposal no later than 3 years after the 50<sup>th</sup> unit is sold. The following information must be included in both testing proposals:

- (1) Applicant identification.
- (2) Diesel emission control strategy family name.
- (3) Parties to be involved in conducting in-use compliance tests.
- (4) Test facility identification and description.
- (5) Quality control and quality assurance procedures for the test equipment.
- (6) List of candidate test units (at least 10 choices per phase) with the following information for each: type of vehicle/equipment on which unit is installed, location, engine information (family name, make, series, model year, displacement), date of manufacture, date of installation, and cleaning/repair history.
- (7) Cumulative sales of the emission control strategy family in each application.
- (9) Predicted mileage or hours of use each diesel emission control system will have by the time it is obtained.
- (10) Description of test vehicles and engines (engine family name, make, model year, displacement, etc.)
- (11) Testing plan for meeting the requirements of part (f) below.

The in-use testing proposal will not be considered approved until the Executive Officer issues the applicant a letter of approval.

- ~~(b)~~ (c) Test Phases. In-use compliance testing, as described below in (c), (d), and (e), must be conducted at two different phases for each diesel emission control strategy family:
- (1) Phase 1. Applicants must obtain and test diesel emission control systems once they have been operated for at least ~~one year or within three months of their first maintenance~~ 25 percent of their minimum warranty period or for one year, whichever comes first.
  - (2) Phase 2. Applicants must obtain and test diesel emission control systems once they have been operated between 60 and 80 percent of their minimum warranty period. For all systems used with heavy heavy-duty vehicles, the 60 to 80 percent window must be applied to the 5 year or 150,000 mile minimum warranty period.
- ~~(e)~~ (d) Selection of Diesel Emission Control Systems for Testing. For each diesel emission control strategy family and for both test phases, the Executive Officer will identify a representative sample of engines or vehicles equipped with diesel emission control systems for in-use compliance testing. The engines or vehicles equipped with the selected diesel emission control systems must have good maintenance records and may receive a tune-up or normal maintenance prior to testing. The applicant must obtain information from the end users regarding the accumulated mileage or hours of usage, maintenance records (to the extent practicable), operating conditions and a description of any unscheduled maintenance that may affect the emission results.
- ~~(d)~~ (e) Number of Diesel Emission Control Systems to be Tested. The number of diesel emission control systems an applicant must test in each of the two test phases will be determined as follows:
- (1) A minimum of four diesel emission control systems in each diesel emission control strategy family must be tested. For every system tested that does not reduce emissions by at least 90 percent of the lower bound of its initial verification level (or does not achieve an emission level less than or equal to 0.011 g/bhp-hr of PM) or does not meet the NO<sub>2</sub> requirement in section 2709(j), two more diesel emission control systems from the same family must be obtained and tested. The total number of systems tested shall not exceed ten per diesel emission control strategy family.
  - (2) At the discretion of the Executive Officer, applicants may begin by testing more than the minimum of four diesel emission control systems. Applicants may concede failure of an emission control system before testing a total of ten diesel emission control systems.
- ~~(e)~~ (f) In-use Compliance Emission Testing. Applicants must follow the testing procedure used for emission reduction verification as described in Section 2703 (both baseline and control tests are required), and special pre-



conditioning requirements may apply (see section 2706(a)(4) for details). In addition, applicants must select the same test cycle(s) that they used to verify the diesel emission control strategy originally. If a diesel emission control strategy verified by U.S. EPA must perform engine dynamometer testing with the Heavy-duty Transient FTP cycle to fulfill the in-use compliance requirements of that program, but was verified by the Executive Officer with chassis dynamometer testing, the Executive Officer will also accept testing with the Heavy-duty Transient FTP cycle for the in-use compliance requirements of this Procedure. If a diesel emission control strategy fails catastrophically during the in-use compliance testing, the applicant must provide an investigative report detailing the causes of the failure to the Executive Officer within 90 days of the failure.

- ~~(f) The Executive Officer may approve an alternative to the in-use testing described above, on a case by case basis, if such testing is overly burdensome to either the applicant or to the end-users due to the nature of the industry the particular diesel emission control systems are used in. The proposed alternative must use scientifically sound methodology and be designed to determine whether the diesel emission control strategy is in compliance with the emission reductions the Executive Officer verified it to.~~
- (g) Alternative Test Cycles and Methods. The Executive Officer may consider, on a case by case basis, an alternative test plan or method for applicants to satisfy in-use compliance requirements. The Executive Officer may consider all relevant information including, but not limited to, the following:
- (1) The testing required by the Procedure is overly burdensome to either the applicant or to the end-users due to the nature of the industry the particular diesel emission control systems are used in.
- (2) The alternative test plan is as scientifically sound as the testing required by the Procedure and it produces accurate results that will realistically indicate if the emission control system reduces emissions to the level it was verified for.
- ~~(g)~~ (h) The Executive Officer may, with respect to any diesel emission control strategy sold, leased, offered for sale, or manufactured for sale in California, order the applicant or strategy manufacturer to make available for compliance testing and/or inspection a reasonable number of diesel emission control systems, and may direct that they be delivered at the applicant's expense to the state board at the Haagen-Smit Laboratory, 9528 Telstar Avenue, El Monte, California or where specified by the Executive Officer. The Executive Officer may also, with respect to any diesel emission control strategy being sold, leased, offered for sale, or manufactured for sale in California, have an applicant compliance test and/or inspect a reasonable number of units at the applicant or manufacturer's facility or at any mutually agreeable test laboratory under the supervision of the ARB Executive Officer.

- (h) (i) In-Use Compliance Report. The applicant must submit an in-use compliance report to the Executive Officer ~~within three months of completing each phase of testing~~ after each phase of testing. The applicant must submit the phase 1 report within 18 months from when the 50<sup>th</sup> unit is sold. The phase 2 report must be submitted within 4 years from when the 50<sup>th</sup> unit is sold. The following information must be reported for each of the minimum of four diesel emission control systems tested:
- (1) Parties involved in conducting the in-use compliance tests.
  - (2) Quality control and quality assurance information for the test equipment.
  - (3) Diesel emission control strategy family name and manufacture date.
  - (4) Vehicle or equipment and type of engine (engine family name, make, model year, model, displacement, etc.) the diesel emission control system was applied to.
  - (5) Mileage or hours the diesel emission control system was in use.
  - (6) Results of all emission testing.
  - (7) Summary of all maintenance, adjustments, modifications, and repairs performed on the diesel emission control system.
- (j) (i) The Executive Officer may request the applicant to perform additional in-use testing if the warranty claims exceed four percent of the number of diesel engines using the diesel emission control strategy, or based on other relevant information. As noted in Section 2707(c), if warranty claims exceed four percent of the number of diesel engines using the diesel emission control strategy, the applicant must notify the Executive Officer and submit a warranty report within 30 calendar days of that time.
- (k) (k) Conditions for Passing In-Use Compliance Testing. For a diesel emission control strategy to pass in-use compliance testing, emission test results must indicate that the strategy reduced emissions by at least 90 percent of the lower bound of the emission reduction level the Executive Officer originally verified it to. In addition, the strategy must meet the requirements of section 2706(a) with the exception that the strategy must not increase emissions of NO<sub>2</sub> by more than an increment equivalent in mass to 33 or 22 percent of the baseline NOx emission level for systems verified under the 30 or 20 percent NO<sub>2</sub> limits, respectively. If the first four diesel emission control systems tested within a diesel emission control strategy family meet both of these standards, the diesel emission control strategy passes in-use compliance testing. If any of the first four diesel emission control systems tested within a diesel emission control strategy family fail to meet either of these standards, and more than four units are tested, at least 70 percent of all units tested must meet both standards for the diesel emission control strategy family to pass in-use compliance testing. For each failed test, for which the cause of failure can be attributed to the product and not to maintenance or other engine-related problems, two additional units must be tested, up to a total of ten units per diesel emission control strategy family. Within 30 days of a test

unit failing, the applicant must send a testing proposal that is compliant with part (b) above to the Executive Officer for approval. After receiving approval from the Executive Officer, the applicant must complete testing.

- ~~(k)~~ (l) Failure of In-use Compliance Testing. If a diesel emission control strategy family does not meet the minimum requirements for compliance, the applicant must submit a remedial report within 90 days after the in-use compliance report is submitted. The remedial report must include:
- (1) Summary of the in-use compliance report.
  - (2) Detailed analysis of the failed diesel emission control systems and possible reasons for failure.
  - (3) Remedial measures to correct or replace failed diesel emission control systems as well as the rest of the in-use diesel emission control systems.
- ~~(l)~~ (m) The Executive Officer may evaluate the remedial report, annual warranty report, and all other relevant information to determine if the diesel emission control strategy family passes in-use compliance testing. The Executive Officer may request more information from the applicant. Based on this review, the Executive Officer may lower the verification level or revoke the verification status of a verified diesel emission control strategy family. The Executive Officer may also lower the verification level or revoke the verification status of a verified diesel emission control strategy family, if the applicant does not conduct in-use compliance testing in accordance with this section, or if the Executive Officer conducts in-use compliance testing in accordance with this section (including alternative testing) and the diesel emission control strategy family does not pass the standards in this section.
- ~~(m)~~ (n) The Executive Officer may lower the verification level or revoke the verification status of a verified diesel emission control strategy family if the applicant fails to observe the requirements of Sections 2706 or 2707. The Executive Officer must allow the applicant an opportunity to address the possible lowering or revocation of the verification level in a remedial report to the Executive Officer and the Executive Officer may make this determination based on all relevant information.

NOTE: Authority cited: Sections 39002, 39003, 39500, 39600, 39601, 39650-39675, 40000, 43000, 43000.5, 43011, 43013, 43018 and 43105, 43600, 43700, Health and Safety Code. Reference: Sections 39650-39675, 43000, 43009.5, 43013, 43018, 43101, 43104, 43105, 43106, 43107, and 43204-43205.5 Health and Safety Code; Title 17 California Code of Regulations Section 93000.

## **§ 2710. Verification of Emission Reductions for Alternative Diesel Fuels and Fuel Additives**

- (a) Applicability. This section applies to in-use strategies that include emission reductions from the use of alternative diesel fuels and fuel additives. Fuel additives are regarded as alternative diesel fuels. The requirements in this section are in addition to those in Sections 2700-2709, except as specifically noted.

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- (d) Emissions Test Procedures for Particulates, Nitrogen Oxides, Soluble Organic Fraction, Hydrocarbons, and Toxics.

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- (3) Emission test requirements and test sequence for emissions test program.

- (A) The applicant must follow the emission test requirements from Section 2703 subsections (a), (b), (k), (l), (m), and (n). For all on-road, ~~off-road, and stationary diesel~~ vehicles and equipment, the applicant must conduct engine dynamometer testing using the Federal Test Procedure (FTP) Heavy-duty Transient Cycle, in accordance with the provisions in the Code of Federal Regulations, Title 40, Part 86, Subpart N. For all off-road and stationary diesel vehicles and equipment, the applicant must conduct engine dynamometer testing in accordance with Section 2703(e)(2) and 2703(e)(3). The applicant must use one of the following test sequences:

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- (g) Fuel Additives. Diesel emission control strategies that use fuel additives must meet the following additional requirements for verification. Fuel additives must be used in combination with a Level 3 diesel particulate filter unless they can be proven, to the satisfaction of the Executive Officer, to be safe for use alone. In addition, the applicant must meet the following requirements:
- (1) The applicant must submit the exact chemical formulation of the fuel additive.
- (2) Diesel emission control systems employing the dosing of an additive in conjunction with a diesel particulate filter must include an on-board monitor of the additive level in the reservoir, integrated with the diesel particulate filter. The on-board monitor for fuel additive must include indicators to notify the operator when the additive level becomes low and when the additive tank is empty. In addition, the on-board monitor must be capable of shutting off the supply of additive, if there is a detected diesel particulate filter problem.
- (3) The applicant must submit to the Executive Officer environmental, toxicological, epidemiological, and other health-related data pertaining to the fuel additive every two years. The Executive Officer will review the data, including any new information, and may revoke the verification if the

data indicate that the fuel additives cause, or are linked, to negative environmental, or health consequences.

(4) The applicant must conduct additional emission tests of fuel additives.

(A) Except as provided in (B) below, the additional emission tests must follow the same test procedures, test cycles, and number of test runs as indicated in Section 2703, except that the concentration of the additive must be at least 50 ppm or 10 times higher than that specified for normal use, whichever is highest. In all other respects, the additive in the high concentration test solutions must be identical to that in the fuel additive submitted for verification.

(B) The applicant may petition to use a concentration less than that required in (A), above, if the higher dose would result in catastrophic damage to the engine. The applicant must supply information on the failure modes, and the level of the additive that would trigger failure. The applicant must also supply information and data supporting the highest feasible dose for testing. An increase in emissions is not by itself sufficient to justify a dose lower than that required in (A), above, and must be correlated to potential engine damage. After reviewing this information and any other relevant information, the Executive Officer shall determine if testing at a lower level could be accepted, or if testing must be conducted at 50 ppm or ten times the specified dose rate as required in (A).

(5) Fuel additives must be in compliance with applicable federal, state, and local government requirements. This requirement includes, but is not limited to, registration of fuel additives with the U.S. EPA.

(g) (h) Other Requirements.

(1) The candidate alternative diesel fuel must be in compliance with applicable federal, state, and local government requirements.

(2) Applicants planning to market fuel in California must contact and register with the U.S. EPA and the California Dept. of Food and Agriculture. Contacts are listed below.

Office of Transportation and Air Quality

U.S. EPA Head Quarters

Ariel Rios Blvd.

1200 Pennsylvania Ave, N.W.

Washington DC 20468

Phone (202) 564-9303

Petroleum Products/Weighmaster Enforcement Branch

Division of Measurement Standards

Dept. of Food and Agriculture

8500 Fruitridge Road, Sacramento CA 95826

Phone (916) 229-3000

(3) Additional government agencies such as the California Energy Commission, Area Council Governments, and Local Air Quality

Management Districts may be contacted to facilitate the marketing of alternative diesel fuel in California.

~~(h)~~ (i) Conditional Verification.

(1) The Executive Officer may grant a conditional verification for an alternative diesel fuel for off-road or stationary application only after the conditional verification for on-road application is granted. The Executive Officer may grant a conditional verification for on-road application if the applicant meets the following conditions:

(A) The applicant has applied for U.S. EPA registration of the alternative diesel fuel;

(B) The U.S. EPA has granted a research and development exemption or otherwise granted permission for the alternative diesel fuel to be used, and;

(C) All relevant requirements of Sections 2700-2710 have been met with the exception that registration with the U.S. EPA has not been completed.

(D) Multimedia Assessment as specified in Section 2710 (f)

(2) Where conditional verification is granted, full verification must be obtained by completing the U.S. EPA registration process within a year after receiving conditional verification. During that year, conditional verification is equivalent to verification for the purposes of satisfying the requirements of in-use emission control regulations.

~~(h)~~ (j) Extensions of an Existing Verification. See Section 2702 (g). The applicant may request the Executive Officer to approve a reduced number of emission tests when extending an existing verification to other emission control groups. In reviewing this request, the Executive Officer may consider all relevant information including, but not limited to, the following:

(1) Variability in the test results used for the existing verification, (2)

Characteristics of the duty cycles in the other emission control groups,

(3) The mechanism by which the alternative diesel fuel reduces emissions, and

(4) Body of existing test data.

NOTE: Authority cited: Sections 39002, 39003, 39500, 39600, 39601, 39650-39675, 40000, 43000, 43000.5, 43011, 43013, 43018 and 43105, 43600, 43700, 43830.8 Health and Safety Code. Reference: Sections 39650-39675, 43000, 43009.5, 43013, 43018, 43101, 43104, 43105, 43106, 43107, 43204-43205.5, and 43830.8 Health and Safety Code; Section 71017 Public Resources Code, Title 17 California Code of Regulations Section 93000.